S C I E N T I F I C E S T I M A T E S C O M I T T E E

18 August 1958

SIXTH ANNUAL PROGRESS REPORT TO THE IAC OF THE
SCIENTIFIC ESTIMATES COMMITTEE
Fiscal Year 1958

I. AUTHORITY FOR THE SCIENTIFIC ESTIMATES COMMITTEE

The Scientific Estimates Committee (SEC) was established on 14 August 1952 by Director of Central Intelligence Directive (DCID) 3/4, pursuant to the provisions of National Security Council Intelligence Directive (NSCID No. 3 and the recommendation of the IAC Ad Hoc Committee to Survey Existing Arrangements Relating to Production of Scientific and Technical Intelligence (IAC-M-79, 14 August 1952).

II. ORGANIZATION OF THE SCIENTIFIC ESTIMATES COMMITTEE

The Permanent membership of the SEC consists of representatives from Central Intelligence Agency, The Joint Staff, the Departments of State, Army, Navy, and Air Force, and the Atomic Energy Commission.

The SEC has no permanent subcommittee structure. It employs ad hoc subcommittees, when needed, to review particular subjects under consideration.

III. GENERAL VIEW OF ADVANCES IN SCIENTIFIC INTELLIGENCE

The community made significant advances during the past year in almost every category of intelligence on sino-Soviet Bloc scientific and technological developments bearing upon the Soviet Union's military posture, economic strength, and international prestige.

IV. RESPONSIBILITIES AND ACCOMPLISHMENTS OF THE SCIENTIFIC ESTIMATES COMMITTEE

Pursuant to DCID 3/4, the SEC is charged with three responsibilities for the coordination of intelligence in scientific and technical fields.* The accomplishments of the SEC under each of its responsibilities are summarized below:

A. The SEC shall "integrate scientific and technical intelligence, as and when required, for the production of national intelligence."

1. The SEC integrated scientific and technical intelligence contributions to seven national intelligence estimates (listed at TAB A). Major efforts in this connection were SEC contributions to NIE 11-4-57, "Main Trends in Soviet Capabilities and Policies 1957-1962," SNIE 11-58, "Possible Soviet Long Range Bomber Development, 1958-1962," SNIE 11-7-58, "Strength and Composition of the Soviet Long-Range Bomber Force." The SEC also contributed judgments within its sphere of responsibility to NIE 11-5-58, "Soviet Capabilities in Guided Missiles and Space Vehicles," and NIE 100-2-58, "Development of Nuclear Capabilities by Fourth Countries: Likelihood and Consequences." In addition the SEC initiated revision of NIE 11-6-56, "Capabilities and Trends of Soviet Science and Technology," in view of intelligence developed since its publication in October 1956. As in the preparation of the previous estimate, the Committee plans to collaborate with JAEIC, GMIC and the Economic Intelligence Committee (EIC) with respect to areas of overlapping responsibility.

*The atomic energy intelligence is assigned to the Joint Atomic Energy Intelligence Committee (JAEIC) by DCID 3/4; guided missile intelligence is assigned to the Guided Missile Intelligence Committee (GMIC) by Annex D to DCID 3/4, dated 31 January 1956.

2. In fulfillment of its implicit responsibility continually to improve the scientific intelligence contribution to national intelligence, the SEC:

a. Revised priority objectives in scientific and technical intelligence in its sphere of responsibility in accordance with Priority National Intelligence Objectives (DCID 1/3). The revised statement, which will be published as an annex to DCID 1/3, continues to provide firm guidance for the collection and production of national scientific and technical intelligence in conformity with national security policy.

b. Contributed to increased community understanding of Soviet developments in conventional weapons; however, critical gaps in intelligence information persist. For example, a great lack of information exists with respect to Soviet research and development on bomber and fighter aircraft. Moreover there is little evidence to judge the effect of missile developments on future aircraft progress or vice versa. An equally critical paucity of information exists on Soviet development of submarines as guided missile carriers and on unconventional propulsion systems for submarines.

c. Noted significant advances during the past year in BW intelligence, largely as the result of new information. In this connection, it was possible for the first time to confirm the community's assessment of the existence of an active Soviet biological warfare research program. In addition, the community improved its knowledge of the Soviet BW defense effort, which is currently receiving emphasis in the USSR.

d. Strengthened its judgments of Soviet capabilities in chemical warfare, particularly with respect to the over-all CW program. Significant intelligence gaps remain, however, pertaining to development of delivery

systems and research for new types of agents, especially those obtainable from natural products.

e. Significantly strengthened intelligence on practically all aspects of Soviet electronics, particularly with respect to current and long-range capabilities, air defense capabilities, and telecommunications.

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f. Stimulated noteworthy advances in our knowledge of the nature and significance of the Soviet Union's great reliance upon science and technology as an instrument to increase its national strength. CIA, supporting in depth scientific intelligence on the Sino-Soviet Bloc, completed a series of monographs on significant facets of Soviet scientific and technological capabilities through 1967.

g. Heightened its interest in intelligence aspects of Soviet activities in the International Geophysical Year, especially with respect to Soviet capabilities for polar operations and Soviet geophysical research of military and economic significance. In this connection, CIA produced a series of briefs as a service of common concern.

h. Assisted member agencies in planning production of scientific and technical intelligence, minimizing duplication of research effort, and identifying possible gaps in coverage, through production of the Fifth "Annual Report of the Status of Scientific and Technical Intelligence Production Projects." This series covers on a world wide basis programmed internal and external research projects of member agencies in this field.

B. The SEC shall "coordinate the production of Chapter VII of the NIS"

1. The SEC fulfilled its NIS commitment for Fiscal Year 1957 by coordinating the production of 21 Sections of Chapter VII, Scientific, and four Sections 17, Scientific, of Chapter I, Brief, and one contribution to an NIS Annual. A tabulation of these contributions is at TAB B.

2. The SEC prepared a consolidated schedule for production of NIS Chapter VII and NIS Section 17 during Fiscal Year 1959. This detailed schedule establishes the timing of each step for the fulfillment of the Committee's NIS commitments during the current fiscal year.

3. In accordance with established procedure, the SEC prepared, with NIS Committee approval, a detailed program for the production of NIS Chapter VII through Fiscal Year 1962. These four-year projections of production programming enable optimum collection in response to specific collection requirements and provide time for necessary research.

C. The SEC shall "stimulate and guide interagency liaison and such working-level conferences as may be appropriate."

1. The SEC provided intelligence advice to the IAC Ad Hoc Committee on Exchanges on proposed exchanges with the USSR in certain scientific and technical fields.

2. In compliance with a request by the Director of Central Intelligence, the SEC provided staff support for US participation in the [redacted] 25X1C

[redacted] 25X1C

V. PROSPECTS FOR THE FUTURE

The future nature of the SEC, or its successor, and the scope of its activities will depend on IAC action on the proposed DCID 3/2, "Production of Scientific Intelligence," which has been processed by the SEC.

TAB A

CONTRIBUTIONS TO NATIONAL INTELLIGENCE ESTIMATES
INTEGRATED BY THE
SCIENTIFIC ESTIMATES COMMITTEE
Fiscal Year 1958

Designation	TITLE
NIE 22-57	The Outlook for France
NIE 11-4-57	Main Trends in Soviet Capabilities and Policies, 1957-1962
SNIE 11-58	Possible Soviet Long Range Bomber Development, 1958-1962
NIE 13-58	Communist China
SNIE 11-7-58	Strength and Composition of the Soviet Long-Range Bomber Force
NIE 100-2-58	Development of Nuclear Capabilities by Fourth Countries: Likelihood and Consequences
NIE 11-5-58	Soviet Capabilities in Guided Missiles and Space Vehicles

TAB B

SECTIONS OF NIS CHAPTER VII AND NIS CHAPTER I
COORDINATED BY THE
SCIENTIFIC ESTIMATES COMMITTEE *
Fiscal Year 1958

	Area	Title	Section	Title
25X6	1	[redacted]	70	Introduction
			72	Air, Ground, and Naval Weapons
			76	Miscellaneous
	4	Netherlands	70	Introduction
			71	Electronics
			72	Air, Ground, and Naval Weapons
			74	Biological Warfare
			75	Chemical Warfare
			76	Miscellaneous
	17	Italy	70	Introduction
			71	Electronics
			72	Air, Ground, and Naval Weapons
			74	Biological Warfare
			75	Chemical Warfare
			76	Miscellaneous
25X6	45	[redacted]	70	Introduction
			71	Electronics
			72	Air, Ground, and Naval Weapons
			74	Biological Warfare
			75	Chemical Warfare
			76	Miscellaneous
	39B	Nationalist China	17	Scientific
	22	Rumania	17	Scientific
	14	Poland	(Annual)	Scientific
	17	Italy	17	Scientific
25X6	45	[redacted]	17	Scientific

*NIS Section 73, Atomic Energy, is coordinated by the JAEIC